

RNA,  
or protein synthesis, by individual genes or by combinations such as  
44/50/51, were not as rapid or complete as the shutoffs caused by

**SPO1**

infection, suggesting that we have yet to identify all components of  
the  
machinery for any of these shutoffs.

REGISTRY NUMBERS: 9014-24-8: RNA polymerase

DESCRIPTORS:

MAJOR CONCEPTS: Infection; Molecular Genetics--Biochemistry and  
Molecular

Biophysics

BIOSYSTEMATIC NAMES: Endospore-forming Gram-Positives--Eubacteria,  
Bacteria, Microorganisms; Enterobacteriaceae--Facultatively  
Anaerobic

Gram-Negative Rods, Eubacteria, Bacteria, Microorganisms; Viruses--  
Microorganisms

ORGANISMS: B. subtilis (Bacillus subtilis) (Endospore-forming  
Gram-Positives)--host; E. coli (Enterobacteriaceae)--host;  
bacteriophage **SPO1** (Viruses)--pathogen

COMMON TAXONOMIC TERMS: Bacteria; Eubacteria; Microorganisms; Viruses

CHEMICALS & BIOCHEMICALS: DNA--synthesis; RNA--synthesis; RNA  
polymerase; antibiotics--antibacterial-drug, antiinfective-drug,  
lethal mechanisms; genes--cloned, expression; operon; protein--  
synthesis

MISCELLANEOUS TERMS: burst-size; cell division; host-takeover;  
knockout

mutations; transcription; Meeting Abstract; Meeting Abstract

CONCEPT CODES:

00520 General biology - Symposia, transactions and proceedings

03502 Genetics - General

10062 Biochemistry studies - Nucleic acids, purines and pyrimidines

10064 Biochemistry studies - Proteins, peptides and amino acids

10802 Enzymes - General and comparative studies: coenzymes

12512 Pathology - Therapy

31000 Physiology and biochemistry of bacteria

31500 Genetics of bacteria and viruses

33504 Virology - Bacteriophage

38502 Chemotherapy - General, methods and metabolism

38504 Chemotherapy - Antibacterial agents

BIOSYSTEMATIC CODES:

07810 Endospore-forming Gram-Positives

06702 Enterobacteriaceae

03000 Viruses

**INVENTOR NAME SEARCH Charles R. Stewart**

5/3/1 (Item 1 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

15225074 PMID: 14996809

Roles of genes 44, 50, and 51 in regulating gene expression and

C  
28 files: 1977 - 2004  
w/ SPO1

host

**takeover during infection of Bacillus subtilis by bacteriophage SPO1 .**

Sampath Aruna; **Stewart Charles R**

Department of Biochemistry and Cell Biology, Rice University,  
Houston,  
Texas 77251, USA.

Journal of bacteriology (United States) Mar 2004, 186 (6) p1785-92,

ISSN 0021-9193 Journal Code: 2985120R

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

**5/3/2 (Item 2 from file: 155)**

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

12352387 PMID: 9657951

**Genes and regulatory sites of the "host-takeover module" in the terminal**

**redundancy of Bacillus subtilis bacteriophage SPO1 .**

**Stewart C R ; Gaslightwala I; Hinata K; Krolikowski K A; Needleman D S;**

Peng A S; Peterman M A; Tobias A; Wei P

Department of Biochemistry and Cell Biology, Rice University,  
Houston,

Texas 77251-1892, USA. crs@bioc.rice.edu

Virology (UNITED STATES) Jul 5 1998, 246 (2) p329-40,  
ISSN

0042-6822 Journal Code: 0110674

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

**5/3/3 (Item 3 from file: 155)**

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

10972221 PMID: 7751311

**Genes that protect against the host-killing activity of the E3 protein of**

**Bacillus subtilis bacteriophage SPO1 .**

**Wei P; Stewart C R**

Department of Biochemistry and Cell Biology, Rice University,  
Houston,

Texas 77005-1892, USA.

Journal of bacteriology (UNITED STATES) May 1995, 177 (10) p2933-7,

ISSN 0021-9193 Journal Code: 2985120R

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: MEDLINE; Completed

5/3/4 (Item 4 from file: 155)  
DIALOG(R)File 155:MEDLINE(R)  
(c) format only 2005 Dialog. All rts. reserv.

10377588 PMID: 8253678  
**A cytotoxic early gene of Bacillus subtilis bacteriophage SP01 .**  
Wei P; Stewart C R  
Department of Biochemistry and Cell Biology, Rice University,  
Houston,  
Texas 77251-1892.  
Journal of bacteriology (UNITED STATES) Dec 1993, 175 (24)  
p7887-900  
, ISSN 0021-9193 Journal Code: 2985120R  
Publishing Model Print  
Document type: Journal Article  
Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: MEDLINE; Completed

5/3/5 (Item 5 from file: 155)  
DIALOG(R)File 155:MEDLINE(R)  
(c) format only 2005 Dialog. All rts. reserv.

07394322 PMID: 2414903  
**Transcription of Bacillus subtilis plasmid pBD64 and  
expression of  
bacteriophage SP01 genes cloned therein.**  
Curran J F; Stewart C R  
Virology (UNITED STATES) Apr 15 1985, 142 (1) p98-111,  
ISSN  
0042-6822 Journal Code: 0110674  
Contract/Grant No.: GM28488; GM; NIGMS  
Publishing Model Print  
Document type: Journal Article  
Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: MEDLINE; Completed

5/3/6 (Item 6 from file: 155)  
DIALOG(R)File 155:MEDLINE(R)  
(c) format only 2005 Dialog. All rts. reserv.

07394321 PMID: 2997983  
**Cloning and mapping of the SP01 genome.**  
Curran J F; Stewart C R  
Virology (UNITED STATES) Apr 15 1985, 142 (1) p78-97,  
ISSN  
0042-6822 Journal Code: 0110674  
Contract/Grant No.: GM-28488; GM; NIGMS  
Publishing Model Print

Document type: Journal Article  
Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: MEDLINE; Completed

**5/3/7 (Item 7 from file: 155)**

DIALOG(R) File 155:MEDLINE(R)  
(c) format only 2005 Dialog. All rts. reserv.

06885175 PMID: 6690720

**Dissection of HA20, a double mutant of bacteriophage SPO1 .  
Stewart C R**

Journal of virology (UNITED STATES) Jan 1984, 49 (1) p300-1,  
ISSN

0022-538X Journal Code: 0113724

Contract/Grant No.: GM28488; GM; NIGMS

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

**5/3/8 (Item 8 from file: 155)**

DIALOG(R) File 155:MEDLINE(R)  
(c) format only 2005 Dialog. All rts. reserv.

05300451 PMID: 96587

**Terminal redundancy of "high frequency of recombination"  
markers of**

**Bacillus subtilis phage SPO1 .**

Cregg J M; Stewart C R

Virology (UNITED STATES) May 15 1978, 86 (2) p530-41,  
ISSN

0042-6822 Journal Code: 0110674

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

**5/3/9 (Item 9 from file: 155)**

DIALOG(R) File 155:MEDLINE(R)  
(c) format only 2005 Dialog. All rts. reserv.

05300396 PMID: 96586

**EcoRI cleavage of DNA from Bacillus subtilis phage SPO1 .**

Cregg J M; Stewart C R

Virology (UNITED STATES) Apr 1978, 85 (2) p601-5, ISSN 0042-  
6822

Journal Code: 0110674

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

**5/3/10 (Item 10 from file: 155)**

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

05031501 PMID: 407713

**Timing of initiation of DNA replication in SPO1 infection of Bacillus subtilis.**

Cregg J M; Stewart C R

Virology (UNITED STATES) Jul 15 1977, 80 (2) p289-96,

ISSN

0042-6822 Journal Code: 0110674

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

**5/3/11 (Item 11 from file: 155)**

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

04992198 PMID: 405794

**Multiple origins of replication for Bacillus subtilis phage SPO1 .**

Glassberg J; Franck M; Stewart C R

Virology (UNITED STATES) May 15 1977, 78 (2) p433-41,

ISSN

0042-6822 Journal Code: 0110674

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

**5/3/12 (Item 12 from file: 155)**

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

04894476 PMID: 401897

**Selective screening procedure for the isolation of heat- and cold-sensitive, DNA replication-deficient mutants of bacteriophage SPO1**

**and preliminary characterization of the mutants isolated.**

Glassberg J; Slomiany R A; Stewart C R

Journal of virology (UNITED STATES) Jan 1977, 21 (1) p54-60,

ISSN

0022-538X Journal Code: 0113724

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

**5/3/13 (Item 13 from file: 155)**

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

04894436 PMID: 401896

**Initiation and termination mutants of Bacillus subtilis bacteriophage**

SPO1 .

Glassberg J; Franck M; Stewart C R

Journal of virology (UNITED STATES) Jan 1977, 21 (1) p147-52,

ISSN

0022-538X Journal Code: 0113724

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

**5/3/14 (Item 1 from file: 5)**

DIALOG(R) File 5:Biosis Previews(R)

(c) 2005 BIOSIS. All rts. reserv.

0014014790 BIOSIS NO.: 200200608301

**Roles of specific genes in host-takeover of B. subtilis by bacteriophage**

SPO1

AUTHOR: Sampath A (Reprint); Myles B (Reprint); Cox K (Reprint); Chen L (Reprint); Stewart C (Reprint)

AUTHOR ADDRESS: Rice University, Houston, TX, USA\*\*USA

JOURNAL: Abstracts of the General Meeting of the American Society for Microbiology 102 p302 2002 2002

MEDIUM: print

CONFERENCE/MEETING: 102nd General Meeting of the American Society for Microbiology Salt Lake City, UT, USA May 19-23, 2002; 20020519

SPONSOR: American Society for Microbiology

ISSN: 1060-2011

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Abstract

LANGUAGE: English

**5/3/15 (Item 2 from file: 5)**

DIALOG(R) File 5:Biosis Previews(R)

(c) 2005 BIOSIS. All rts. reserv.

0011623116 BIOSIS NO.: 199800417363

**SPO1 gene 56 product inhibits B. subtilis cell division**

AUTHOR: Petti A A; Stewart C R

AUTHOR ADDRESS: Rice Univ., Houston, TX, USA\*\*USA

JOURNAL: Abstracts of the General Meeting of the American Society for Microbiology 98 p362 1998 1998

MEDIUM: print

CONFERENCE/MEETING: 98th General Meeting of the American Society for

Microbiology Atlanta, Georgia, USA May 17-21, 1998; 19980517  
SPONSOR: American Society for Microbiology  
ISSN: 1060-2011  
DOCUMENT TYPE: Meeting; Meeting Abstract; Meeting Poster  
RECORD TYPE: Citation  
LANGUAGE: English

**5/3/16 (Item 3 from file: 5)**  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2005 BIOSIS. All rts. reserv.

0011623115 BIOSIS NO.: 199800417362  
**The early genes of Bacillus subtilis bacteriophage SP01**  
AUTHOR: Stewart C R (Reprint  
AUTHOR ADDRESS: Rice Univ., Houston, TX, USA\*\*USA  
JOURNAL: Abstracts of the General Meeting of the American Society for  
Microbiology 98 p362 1998 1998  
MEDIUM: print  
CONFERENCE/MEETING: 98th General Meeting of the American Society for  
Microbiology Atlanta, Georgia, USA May 17-21, 1998; 19980517  
SPONSOR: American Society for Microbiology  
ISSN: 1060-2011  
DOCUMENT TYPE: Meeting; Meeting Abstract; Meeting Poster  
RECORD TYPE: Citation  
LANGUAGE: English

**5/3/17 (Item 4 from file: 5)**  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2005 BIOSIS. All rts. reserv.

0008610881 BIOSIS NO.: 199345041862  
**Early gene e3 of Bacillus subtilis bacteriophage SP01**  
AUTHOR: Wei Ping; Stewart Charles R  
AUTHOR ADDRESS: Dep. Biochem. Cell Biol., Rice Univ., Houston, TX  
77251-1892, USA\*\*USA  
JOURNAL: Abstracts of the General Meeting of the American Society for  
Microbiology 93 (0): p292 1993  
CONFERENCE/MEETING: 93rd General Meeting of the American Society for  
Microbiology Atlanta, Georgia, USA May 16-20, 1993; 19930516  
ISSN: 1060-2011  
DOCUMENT TYPE: Meeting  
RECORD TYPE: Citation  
LANGUAGE: English

**5/3/18 (Item 5 from file: 5)**  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2005 BIOSIS. All rts. reserv.

0008583845 BIOSIS NO.: 199345014825  
**SP01 and related bacteriophages**  
**BOOK TITLE: Bacillus subtilis and other gram-positive bacteria:**  
**Biochemistry, physiology and molecular genetics**  
AUTHOR: Stewart Charles R  
BOOK AUTHOR/EDITOR: Hoch J A (Editor); Losick R (Editor)

AUTHOR ADDRESS: Dep. Biochem. Cell Biol., Rice Univ., Houston, TX  
77251,  
USA\*\*USA  
p813-829 1993  
BOOK PUBLISHER: American Society for Microbiology (ASM) {a}, Books  
Division, 1325 Massachusetts Ave. NW, Washington, DC  
20005-4171, USA  
ISBN: 1-55581-053-5  
DOCUMENT TYPE: Article  
RECORD TYPE: Citation  
LANGUAGE: English

5/3/19 (Item 6 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2005 BIOSIS. All rts. reserv.

0004694430 BIOSIS NO.: 198580003325  
**CLONING AND MAPPING OF THE PHAGE SPO-1 GENOME**  
AUTHOR: CURRAN J F (Reprint); STEWART C R  
AUTHOR ADDRESS: DEP BIOLOGY, RICE UNIV, HOUSTON, TEXAS 77005, USA\*\*USA  
JOURNAL: Virology 142 (1): p78-97 1985  
ISSN: 0042-6822  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: ENGLISH

5/3/20 (Item 7 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2005 BIOSIS. All rts. reserv.

0002475578 BIOSIS NO.: 197866062062  
**ECO-R-I CLEAVAGE OF DNA FROM BACILLUS-SUBTILIS PHAGE SPO-1**  
AUTHOR: CREGG J M (Reprint); STEWART C R  
AUTHOR ADDRESS: DEP BIOL, RICE UNIV, HOUSTON, TEX 77001, USA\*\*USA  
JOURNAL: Virology 85 (2): p601-605 1978  
ISSN: 0042-6822  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: ENGLISH

5/3/21 (Item 8 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2005 BIOSIS. All rts. reserv.

0002220435 BIOSIS NO.: 197764068792  
**TIMING OF INITIATION OF DNA REPLICATION IN PHAGE SPO-1 INFECTION OF  
BACILLUS-SUBTILIS**  
AUTHOR: CREGG J M; STEWART C R  
JOURNAL: Virology 80 (2): p289-296 1977  
ISSN: 0042-6822  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: Unspecified



5/3/22 (Item 9 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2005 BIOSIS. All rts. reserv.

0002123716 BIOSIS NO.: 197763044572  
**SELECTIVE SCREENING PROCEDURE FOR THE ISOLATION OF HEAT SENSITIVE AND COLD**

**SENSITIVE DNA REPLICATION DEFICIENT MUTANTS OF BACTERIO PHAGE SPO-1 AND**

**PRELIMINARY CHARACTERIZATION OF THE MUTANTS ISOLATED**

AUTHOR: GLASSBERG J; SLOMIANY R A; STEWART C R  
JOURNAL: Journal of Virology 21 (1): p54-60 1977  
ISSN: 0022-538X  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: Unspecified

5/3/23 (Item 1 from file: 73)  
DIALOG(R)File 73:EMBASE  
(c) 2005 Elsevier Science B.V. All rts. reserv.

01845943 EMBASE No: 1981217100  
**Limited role of parental DNA in replication during infection by Bacillus**

**subtilis phage SPO1**

Stewart C.R. ; Franck M.

Dept. Biol., Rice Univ., Houston, Tex. 77001 United States  
Virology ( VIROLOGY ) (United States) 1981, 110/1 (221-224)  
CODEN: VIRLA  
DOCUMENT TYPE: Journal  
LANGUAGE: ENGLISH

5/3/24 (Item 1 from file: 144)  
DIALOG(R)File 144:Pascal  
(c) 2005 INIST/CNRS. All rts. reserv.

11342574 PASCAL No.: 94-0164711  
**A cytotoxic early gene of Bacillus subtilis bacteriophage SPO1**  
PING WEI; STEWART C R  
Rice univ., dep. biochemistry cell biology, Houston TX 77251-1892,  
USA  
Journal: Journal of bacteriology, 1993, 175 (24) 7887-7900  
Language: English

5/3/25 (Item 2 from file: 144)  
DIALOG(R)File 144:Pascal  
(c) 2005 INIST/CNRS. All rts. reserv.

02056124 PASCAL No.: 78-0391879  
**TERMINAL REDUNDANCY OF "HIGH FREQUENCY OF RECOMBINATION" MARKERS OF BACILLUS SUBTILIS SPO1 .**  
CREGG J M; STEWART C R  
DEP. BIOL., RICE UNIV., HOUSTON, TEX. 77001

Journal: VIROLOGY, 1978, 86 (2) 530-541  
Language: ENGLISH

5/3/26 (Item 1 from file: 399)

DIALOG(R) File 399:CA SEARCH(R)

(c) 2005 American Chemical Society. All rts. reserv.

142291328 CA: 142(16)291328q PATENT

Protein sequences of antimicrobial proteins isolated from SP01  
bacteriophage

INVENTOR(AUTHOR): Stewart, Charles R.; Shamoo, A. Yousif

LOCATION: USA

ASSIGNEE: Rice University

PATENT: U.S. Pat. Appl. Publ. ; US 20050054571 A1 DATE: 20050310

APPLICATION: US 809761 (20040325) \*US PV457287 (20030325)

PAGES: 36 pp. CODEN: USXXCO LANGUAGE: English CLASS: 514012000;  
A61K-038/16A; C07K-014/005B

5/3/27 (Item 2 from file: 399)

DIALOG(R) File 399:CA SEARCH(R)

(c) 2005 American Chemical Society. All rts. reserv.

100048397 CA: 100(7)48397v JOURNAL

Dissection of HA20, a double mutant of bacteriophage SP01

AUTHOR(S): Stewart, Charles R.

LOCATION: Dep. Biol., Rice Univ., Houston, TX, 77005, USA

JOURNAL: J. Virol. DATE: 1984 VOLUME: 49 NUMBER: 1 PAGES: 300-1

CODEN: JOVIAM ISSN: 0022-538X LANGUAGE: English

5/3/28 (Item 3 from file: 399)

DIALOG(R) File 399:CA SEARCH(R)

(c) 2005 American Chemical Society. All rts. reserv.

97139536 CA: 97(17)139536a JOURNAL

Recombination and expression of a cloned fragment of the DNA of  
Bacillus

subtilis bacteriophage SP01

AUTHOR(S): Curran, James F.; Stewart, Charles R.

LOCATION: Dep. Biol., Rice Univ., Houston, TX, 77001, USA

JOURNAL: Virology DATE: 1982 VOLUME: 120 NUMBER: 2 PAGES: 307-17

CODEN: VIRLAX ISSN: 0042-6822 LANGUAGE: English

?

INVENTOR NAME SEARCH A. Yousif Shamoo

7/K/1 (Item 1 from file: 399)

DIALOG(R) File 399:CA SEARCH(R)

(c) 2005 American Chemical Society. All rts. reserv.

142291328 CA: 142(16)291328q PATENT

Protein sequences of antimicrobial proteins isolated from SP01  
bacteriophage

INVENTOR(AUTHOR): Stewart, Charles R.; Shamoo, A. Yousif

PG Pub only Pub.

LOCATION: USA  
ASSIGNEE: Rice University  
PATENT: U.S. Pat. Appl. Publ. ; US 20050054571 A1 DATE: 20050310  
APPLICATION: US 809761 (20040325) \*US PV457287 (20030325)  
PAGES: 36 pp. CODEN: USXXCO LANGUAGE: English CLASS: 514012000;  
A61K-038/16A; C07K-014/005B

## DIALOG INVENTOR NAME SEARCH STRATEGY

Set	Items	Description
S1	4592	AU=((STEWART, C?) OR (STEWART C.R.) OR (STEWART C.?))
S2	49	S1 AND SP01
S3	11048	AU=((STEWART, C?) OR (STEWART C.R.) OR (STEWART C.?)) OR (S- TEWART C?))
S4	100	S3 AND SP01
S5	28	RD (unique items)
S6	742	AU=((SHAMOO, A?) OR (SHAMOO A?) OR (SHAMOO A.Y.) OR (SHAMOO AY))
S7	1	S6 AND SP01
?		